

Postexposure HIV prophylaxis

Occupational (Needlestick) postexposure prophylaxis:

- needlesticks

Non-occupational exposure:

- men who have unprotected receptive anal intercourse with men
- unprotected receptive vaginal or anal intercourse
- IV drug users sharing needles with person with known HIV infection

Choosing no postexposure prophylaxis vs. Basic regimen vs. Expanded regimen:

- no postexposure prophylaxis (PEP) if
 - source without HIV infection
 - source with unknown HIV status, but HIV not likely
 - source with unknown HIV status, and exposure limited to small volume (for example, few drops) of mucous membrane exposure
- Basic regimen (2 drugs) recommended if
 - source with unknown HIV status, but HIV likely
 - source has asymptomatic HIV infection or known low viral load (for example, < 1,500 RNA copies/mL) and exposure type less severe (for example, solid needle or superficial injury)
 - source has asymptomatic HIV infection or known low viral load (for example, < 1,500 RNA copies/mL) and exposure type mucous membrane or nonintact skin exposure
- Expanded regimen (3 or more drugs) recommended if
 - more severe exposure type (for example, large-bore hollow needle, deep puncture, visible blood on device, needle used in artery or vein) and source with HIV infection
 - source with HIV infection with
 - symptomatic HIV infection
 - acquired immunodeficiency syndrome (AIDS)
 - acute seroconversion
 - known high viral load

All regimens

- start postexposure prophylaxis as soon as possible (within hours instead of days), starting basic regimen if decision between basic or expanded regimen not yet determined
- full 28-day regimen is recommended
- adherence to regimen extremely important
- seek expert consultation if source has HIV infection and prior antiretroviral experience

Basic regimens (2 drugs):

- zidovudine (Retrovir, ZDV, AZT) plus lamivudine (Epivir, 3TC), combination available as Combivir
 - zidovudine 300 mg twice daily or 200 mg 3 times daily with food
 - lamivudine 300 mg once daily or 150 mg twice daily
 - Combivir 1 tablet twice daily
- zidovudine (Retrovir, ZDV, AZT) plus emtricitabine (Emtriva, FTC)
- tenofovir DF (Viread, TDF) plus lamivudine (Epivir, 3TC)
- tenofovir DF (Viread, TDF) plus emtricitabine (Emtriva, FTC), combination available as Truvada
- many alternative basic regimens

Expanded regimens (3 or more drugs):

- preferred expanded regimen is basic regimen plus lopinavir/ritonavir (Kaletra, LPV-RTV)
 - requires additional contraceptive measures (may increase metabolism of oral contraceptives)
- many alternative expanded regimens, basic regimen plus one of

Antiretroviral drugs not generally recommended for postexposure prophylaxis:

- nevirapine (Viramune, NVP)
 - nevirapine associated with 27 potentially life-threatening events in 22 patients, so risk may outweigh benefits in postexposure prophylaxis
- delavirdine (Rescriptor, DLV)
- abacavir (Ziagen, ABC)
- zalcitabine (Hivid, ddC)
- enfuvirtide (Fuzeon, T20) use recommended only with expert consultation

Additional testing:

- check HIV antibody by enzyme immunoassay at baseline, 6 weeks, 3 months and 6 months
- extended follow-up (12 months) if source patient co-infected with HIV and hepatitis C
- test for hepatitis B and hepatitis C
- if sexual exposure consider testing for other sexually transmitted infections and pregnancy
- check liver and renal function tests and blood counts as needed for selected antiretroviral drugs

Counseling:

- counsel regarding
 - importance of medication adherence
 - possible medication side effects
 - abstinence or safe-sex techniques
 - signs of primary HIV infection
- interactive counseling by trained nurse may increase adherence with postexposure prophylaxis and HIV testing
- telephone support may not increase adherence with postexposure prophylaxis following rape